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## Commentaries

# Causality, social selectivity or artefacts? Why socioeconomic inequalities in health are not smallest in the Nordic countries

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**Keywords:** Europe, health, Nordic countries, socioeconomic position.

The Nordic welfare states aim at providing equality of the highest standards for all their citizens. However, numerous studies have demonstrated that socioeconomic inequalities in morbidity and mortality are not among the smallest in these countries as compared with other European regions.<sup>1–7</sup> Recently, this has spurred health researchers to evaluate the extent to which the Nordic welfare regime is capable of diminishing socioeconomic health inequalities.<sup>8,9</sup> After all, the conclusion that the Nordic welfare regime does not succeed in reducing health inequalities would have serious implications for health policy world wide. In this commentary, we aim at evaluating why the Nordic welfare regime does not completely succeed in reducing socioeconomic inequalities in health, despite its egalitarian nature. Our presentation is divided into three types of explanations: causality, social selectivity and artefacts.

Scholars have generally argued that a distinction should be made between relative and absolute socioeconomic health inequalities. Moreover, the absolute health status of the weakest socioeconomic groups (e.g. manual workers) is considered to be most important as a marker of the ability of welfare regimes to reduce socioeconomic disparities in health. Using this distinction, it was concluded that whereas the Nordic countries perform only intermediately whenever relative inequalities are considered, they have lower absolute inequalities and a higher average absolute health status of the lowest socioeconomic groups as compared with other European societies (although this applies mostly to Sweden and Norway, and only to a lesser extent to Denmark and Finland). Since the authors argue that welfare regime performance should mainly be evaluated through absolute measures of health status and health inequalities, they assert that Nordic welfare regimes do not perform that poorly after all.

Unfortunately, this conclusion has put the issue of identifying why the Nordic countries do not have the smallest socioeconomic health inequalities in the background. We agree that measures of relative health inequalities should be accompanied by an examination of absolute health status and health inequalities,<sup>10</sup> but a sole focus on the absolute measures in evaluating the Nordic welfare regimes seems unwarranted. After all, apart from improving levels

of welfare and well-being in general, the Nordic welfare regimes explicitly aim at reducing differences between social groups. Thus, even though the weakest socioeconomic groups may be better off in the Nordic countries as compared with other European regions, the mere fact that there is a substantial health gap between those who are most disadvantaged and the higher socioeconomic groups implies that the Nordic welfare regime does not succeed in part of its mission. Therefore, to adequately evaluate the performance of the Nordic welfare regime, relative and absolute measures should be examined jointly, and the conclusion that the Nordic countries perform better than other European societies is premature.

As a result, from a health policy perspective, an appropriate evaluation of why the Nordic welfare regime does not completely succeed in reducing socioeconomic inequalities requires further examination of the exact mechanisms that cause this seemingly paradoxical finding. Although possible mechanisms are suggested in the studies mentioned, a comprehensive overview is still lacking (which may be partly due to these authors considering relative inequalities to be less relevant).

Initially, we would like to address three possible *causal influences* of the egalitarian Nordic welfare regime type itself. First, it may be the case that adversity is especially damaging when living in a prosperous society, which also claims to be egalitarian and meritocratic. People with a lower socioeconomic position do not only perceive their personal situation as potentially being worse compared with other groups, but they may also feel that there is little chance of improvement, since they have apparently failed to make good use of the possibilities that have been offered to them. Secondly, even in case of no mobility, mortality and morbidity are decreasing more pronouncedly among high status groups compared with low status groups in the Nordic countries; everyone benefits (in an absolute sense) from egalitarianism, but higher social groups are more able to do so than lower social groups, for instance by making better use of the medical system. Thirdly, health differences between social groups may be relatively large in the Nordic countries because of mortality selection. This implies that whereas the frailest part of the population dies during childhood in other European regions, the quality of the medical system in the Nordic countries allows these people to survive. However, they generally do so in poor health. Since these people may be overrepresented in lower as compared with higher social groups, social health inequalities would become larger when frailer people survive.

The unexpectedly strong relative socioeconomic health inequalities in the Nordic countries may also be caused by *social selectivity*, instead of causation—in at least two ways. First, the socioeconomic gradient in smoking prevalence

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is much steeper in the Nordic countries as compared with countries in the South. It may be more culturally and normatively accepted to smoke among higher social groups, whereas this may be less true for the Nordic countries. As a result, smokers are a more socially selective group in the Nordic countries as compared with other societies. Secondly, in a related way, like most other countries in Western Europe, the Nordic countries are faced with a relatively large influx of immigrants. In general, these immigrants (especially those from non-Western societies) often have a low socioeconomic position and also encounter problems in obtaining access to health services. Additionally, knowledge on healthy lifestyles is less widespread among immigrants, and immigrants are generally less healthy than the native population. Given that both the average health and socioeconomic position are relatively high in the Nordic countries, immigrants in these societies form a socially more selective group as compared with other countries. As a result, the impact of the immigrant population on socioeconomic inequalities in health may be stronger in the Nordic countries, leading to a relatively steep social gradient in health.

The paradoxical position of the Nordic countries may be the result of a statistical *artefact*. First, it has been argued that variations in health inequalities can be explained by a mathematical rule rather than by substantial interpretations. However, it should be confirmed by other cross-national studies whether or not it would be an overestimation to entirely attribute cross-national health differences to this type of artefact. Secondly, it has been argued that variations between countries in the level of *self-assessed* social health inequalities may be due to cross-cultural variations in the self-report of health. However, little is known at this stage about the extent to which cross-cultural variation in reporting styles also affects cross-national differences in social health inequalities.

These three types of explanations would have radically different implications for the evaluation of the Nordic welfare regime. Finding support for causation mechanisms would imply that the Nordic welfare regime itself is responsible for socioeconomic health inequalities being only intermediate. From a policy perspective, this would mean that, although the universalistic and redistributive approach taken in the Nordic countries makes positive overall health outcomes, it does not sufficiently reduce the *relative* inequalities in health. If the counterintuitive position of the Nordic countries is mainly caused by selectivity issues, however, changing welfare

policy would not result in any improvement. In case of artefacts being most prominent as an explanation, policy modifications would not only be futile, but also unnecessary. Therefore, after this brief systematization of explanations, we call for an elaborate further examination of this issue in empirical research. In doing so, specific attention should be paid to different indicators of people's socioeconomic position (i.e. education, occupation or class, and income), and both relative and absolute inequalities should be considered, as well as the absolute health status of both the weakest and strongest socioeconomic groups.

*Conflicts of interest:* None declared.

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